

Attorney Docket No.: RU-0075
Inventors: Anderson and Montelione
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In the Claims:

Please cancel claims 2 and 17 without prejudice.

Please amend the claims as follows:

1. (Four Times Amended) A high-throughput method for determining the biochemical function of a protein or polypeptide domain of unknown three dimensional structure and function comprising:

- (A) parsing a target polynucleotide into at least one putative polypeptide domain;
- (B) identifying a putative polypeptide domain consisting of 50 to 300 amino acids that properly folds into a stable polypeptide domain consisting of 50 to 300 amino acids;
- (C) determining three dimensional structure of the stable polypeptide domain;
- (D) comparing the determined three dimensional structure of the stable polypeptide domain to known three-dimensional structures in a protein data bank, wherein said comparison identifies known structures within said protein data bank that are